EXAMINATION (total time 18 mins)

LOGISTICS

For GPE, Respiratory, GI, CVS and motor part of CNS

1) Watch
2) Thermometer
3) BP apparatus
4) Stethoscope
5) Torch
6) Hammer
7) Measuring tape
8) Tongue depressor
9) Scale for JVP measurement
10) Key

For sensory part of CNS

1) Cotton
2) Paper pin
3)Tuning fork 128

For Cranial nerves

1) To check sense of smell lemon, soap, banana, mint, orange peel
2) Near vision chart
3) Snellen's chart
4) Ishihara chat
5) Fundoscope
6) Red hat pin
7) To check taste sensation sugar, salt, vinegar.
8) Tuning fork 256

GPE (3minutes)

After history taking is over proceed with the examination. If the patient is sitting then ask him to lay supine with the couch preferably at 45^0. Ask him to put off his shirt. Cover below umbilicus with sheet.

Look for any IV canula, NG tube, Foleys catheter, O_2 mask or central venous line.

GENERAL LOOK: Spend 5 seconds for a general look for any obvious finding like obesity, emaciation, cushingoid face, hyper or hypo thyroid or nephrotic or scleroderma or Parkinson face or presence of butterfly rash.

VITALS: Start GPE with checking his vitals. Check temperature with thermometer in left axilla. Check pulse rate, rhythm, character and radio radial and radio femoral delay and collapsing pulse (ask for shoulder pain before checking collapsing pulse دائیں کندھے میں درد تو نہیں؟). Check RR, BP.

HANDS: NAILS (6): Then move to hands. On nail look for leuconychia, koilonychia, clubbing, nicotine stains, splinter hemorrhages, psoriatic nail pitting.

HANDS: PALMER ASPECT (8): On palmer aspect look for Sweaty hands, pallor, cyanosis, palmer erythema, dupuytren's contracture, skin crease pigmentation, Osler nodes, janewey lesions.

HANDS: DORSAL ASPECT (4): On dorsum of hand look for Wasting, bouchard's nodes (PIPJ), heberden's nodes (DIPJ), RA deformities.

HANDS: TREMORS (2): Then look for tremors. Both fine tremors and flaps.

ARMS (5): In the upper limb look for bruises, AV fistula, rheumatoid nodules one extensor surface of forearm and epitrochler lymph nodes (NHL) and tattoos.

FACE: EYES (4): Then move to face. In eyes look for pallor, jaundice, congestion (conjunctivitis, scleritis, episcleritis, uvetis etc), xanthelasmas. (Or any obvious cranial nerve finding can roughly be checked at this point e.g. ptosis, eye movements, nystagmus and light reflexes).

FACE: CHEEKS (2): On cheeks check for rash or parotid enlargement.

FACE: ORAL CAVITY (5): In oral cavity look for oral hygiene, central cyanosis, texture of tongue (bald tongue, beefy tongue etc or thrush), throat congestion and palatal and uvula movements (cranial nerve IX and X).

NECK (3) Then move to neck ask him to swallow گھونٹ بھریں/تھوک اندر نگلیں. Look for goiter. Look for JVP with hepatojuglar reflex. Look for dancing carotids (Corrigan's sign of AR). Then neck and axillary lymph nodes. (Examination of Neck lymph nodes is to be postponed and checked when the patient is made to sit for examination of back of chest).

LEGS AND FEET (6): Then move down to legs to look for pedal edema, diabetic foot, and in legs for bruising, DVT, or cellulitis or obvious vericos veins.

After GPE is complete then move on to systemic examination. Start with the system most likely expected to be involved on basis of history and GPE.

RESPIRATORY SYSTEM

BACK OF CHEST (3mins)

EXPOSURE: shirt off

POSTURE: sitting with the back towards examiner, arms crossed (ask him to cross his arms maximally to move scapula apart).

INSPECTION (7)

Stand at some distance and ask patient to take deep breaths گہرے گہرے سانس لیں

Look for (1) shape of chest, (2) movement of chest with breathing, (3) any deformity of spine, (4) any bulge or asymmetry, (5) bandage for pleural fluid aspiration or chest tube insertion or pleural biopsy, (6) intercostal recession (7) any visible veins or scar marks.

PALPATION (5) (or 3 if 4 and 5 are omitted)

Warm your hands by rubbing before touching the patient and ask for pain چھاتی میں درد تو نہیں

1) Palpate chest generally for tenderness and ask for pain اگر ہاتھ لگانے سے درد ہو تو بتائیں

2) Check integrity of spine and spine tenderness (look at the face while checking for tenderness)

3) Chest movements: thumbs should not touch the chest wall and should be almost meeting in midline. Check at 2 points on back (Apex and lower chest). (Thumbs should move at least 5cm apart).

4) Chest expansion with measuring tape at the level of nipples. (May or may not check).

5) Vocal fremitus. (May or may not check).

PERCUSSION (1)

Percus apices, back and lateral chest, compare the 2 sides. (Don't forget lateral chest and axillas. Improve your percussion technique with practice)

AUSCULTATION (2)

1) Auscultate apices, back and lateral chest, compare the 2 sides, don't forget lateral chest and axillas. Listen for quality of breath sounds (vesicular or bronchial), intensity of breath sounds (normal, increased or decreased), and any added sounds (crepts or wheeze or pleural rub). If crepts are heard then ask the patient to cough and look for change in crepts character. (Crepts unchanged with coughing.....DPLD). Check if crepts or wheeze is inspiratory or expiratory.
2) Vocal resonance: ask the patient to say 3, 3, 3. بولیں تین، تین، تین Listen at apices, back and lateral chest, compare the 2 sides, don't forget lateral chest and axillas.

(Respiratory examination is not complete without checking mediastinal shift i.e. trachea and apex beat localization do it as first thing as soon as u have asked him to lay supine).

While the patient is sitting use the opportunity to check sacral edema and then neck lymph node examination if not checked during GPE.

FRONT OF CHEST (3mins)

For examination of front of chest ask him to lie on couch with couch angled at 45 degrees, arms by side and slightly abducted.

Inspect from foot end and from side tangentially. Look for same findings as mentioned in inspection of back of chest plus look for type of breathing. In palpation after checking for chest tenderness, check for trachea and apex beat and then check for chest movements. In percussion, percus in supraclavicular fossa as well and don't forget lateral chest and axillas. Also look for liver dullness. Auscultation and vocal resonance is same as for back of chest.

CVS (3mins)

EXPOSURE: shirt off

POSTURE: Laying supine with bed at 45^0, arms by side and slightly abducted.

INSPECTION (4)

1) From foot end look for any (1) bulge or asymmetry or (2) deformity, (3) visible veins or scar marks (sternotomy, valve replacement, TPM)
2) From right side of patient look for (4) pulsations (apex beat, pulsatlie precordium, epigastric pulsations or pulsations in suprasternal notch)

PALPATION (5)

Warm your hands by rubbing before touching the patient and ask for pain چھاتی میں درد تو نہیں

1) Palpate chest generally for tenderness and ask for pain اگر ہاتھ لگانے سے درد ہو تو بتائیں
2) Apex beat. Measure it in relation to intercostals spaces and mid clavicular line. If not palpable then turn the patient to left side and palpate. (Note its character i.e. normal, heaving or tapping or thrusting or forceful).
3) Palpate all the areas for thrill. If thrill felt, then time it with carotids (i.e. systolic or diastolic). (Also note if P2 is palpable in while palpating pulmonary area).
4) Left parasternal heave (RVH).
5) Epigastric heave (RVH).

AUSCULTATION (5)

1) Relocate apex beat (to define the mitral area) and then auscultate it while the thumb of left hand on patients right carotid pulse. Listen for intensity of heart sounds i.e. soft or loud (S1 soft in MR and loud in MS). If systolic murmur is heard then look for its radiation into the axilla.
   Turn the patient to left to listen for diastolic murmur in mitral area (MS) with bell and the patient to expire سانس اندر لیں - باہر نکالیں اور باہر نکال کر روک لیں
2) Then auscultate tricuspid area for intensity of heart sounds (soft S1 in TR) or murmur. Ask the patient to inspire سانس اندر لیں اور اندر ہی کر روک لیں
3) Then auscultate pulmonary area for intensity of heart sounds or murmur. (Loud P2 in pulmonary HTN). Also focus on split of 2nd heard sound in pulmonary area. Ask the patient to inspire سانس اندر ہی کر روک لیں. (Split is best heard in pulmonary area with breath held in inspiration, delaying RV emptying and increasing the split).
4) Then auscultate aortic area (A1) for intensity of heart sounds (loud A2 in HTN while soft A2 in AS or AR) or murmur. Ask the patient to expire سانس باہر نکال کر روک لیں (if ejection systolic murmur of AS is audible then check its radiation to carotids).
5) Then ask the patient to sit and bend forward with steth placed on A2 area. Ask him to expire سانس باہر نکال کر روک لیں. And listen for diastolic murmur of AR.

   Note: If there CVS examination is suggestive of any particular valvular lesion then examination can be modified at this point to look for peripheral signs of that valvular lesion e.g. in case of early diastolic murmur of AR, look for peripheral signs of AR.

ABDOMINAL EXAMINATION (3mins)

POSTURE: Lying supine

EXPOSURE: Expose from nipples to mid thigh ideally and cover the rest with sheet.

INSPECTION (9)

1) Inspect from foot end for (1) symmetry, (2) shape, (3) umbilicus, (4) hair distribution, (5) visible veins and scar marks.
2) Inspect from side from bed level (tangentially) for (6) pulsation and (7) peristalsis.
3) Ask the patient to cough and look for (8) cough impulse at hernia orifices.
4) Inspect for (9) genitalia but take separate consent first.

PALPATION (8 or 6 if hernia orifices and aorta are omitted)

- Warm your hands by rubbing before touching the patient and ask for pain and ask him to relax his abdomen پیٹ میں کسی جگہ درد تو نہیں اگر ہاتھ لگانے سے درد ہو تو بتائیں
- Look at face during palpation. May flex the knees if abdomen not adequately relaxed.

1) Superficial palpation.
2) Deep palpation for Lymph nodes and masses.
3) Liver: measure span in cms (measure your finger breadth). If palpable describe other features of liver like border, consistency, surface, tenderness.
4) Spleen: use all three methods if not palpable. If palpable focus on features like size, consistency, notch etc. (palpation by laterally turning the patient to be done when the patient is turned lateral for checking shifting dullness).
5) Kidneys: bimanual palpation.
6) Urinary bladder: palpate using left hand. No command for breathing.
7) May palpate hernial orifice with command for cough.
8) May palpate for aorta in midline above umbilicus with finger tips

PERCUSSION (3)

1) Percus all quadrants radially from umbilicus.
2) Shifting dullness.
3) Fluid thrill. Only if appropriate. Place the patient's hand in center only if thrill is felt without placing the hand.

AUSCULTATION (4).

1) For bowel sounds auscultate on right side of umbilicus. Normal frequency is 1 per 5-10 sec. Labeled absent if not heard for 2min.
2) For aortic bruit (aneurysm/atheroma), auscultate above umbilicus in midline.
3) For renal bruit (renal artery stenosis), auscultate 2-3cm above and lateral to umbilicus.
4) For hepatic or spleenic bruit (in case of hepato or spleenomegally) or friction rub, auscultate over liver and spleen.
5) Succession splash: not routinely done.

CNS (8mins)

Scheme: start with motor system of lower limb then motor system of upper limb then sensory system (4 sensations light touch, joint position sense, vibration, superficial pain(deep pain and temperature can be omitted))then cerebellum and then cranial nerves. Stance and Gait and fundoscopy can be checked at the completion of all the examination. Examination of CNS may need to be shortened in situations where CNS pathology in not expected and there is limitation of time.

MOTOR SYSTEM OF LOWER LIMB

POSTURE: lying supine.

EXPOSURE: expose legs up to mid thighs (up to umbilicus is ideal in order to ensure inspection for proximal muscle wasting)

1. INSPECTION (4)

From foot end Inspect for wasting, asymmetry, deformity / contractures and abnormal movements / fasciculations.

2. PALPATION (3 0R 2 IF 3 IS OMITTED)

Warm your hands by rubbing before touching the patient and ask for pain ٹانگوں میں درد تو نہیں

1) Check for fasciculations by tapping the muscles.
2) Palpate the muscles generally for tenderness (myositis). Look at the face while palpating.
3) Bulk: can be measure with measuring tape from some reference point like medial maleolus or tibial tuberosity.

3. TONE (2)

Ask the patient to relax ٹانگیں ڈھیلی چھوڑ دیں

1) Begin with rolling movement of leg.
2) Check tone in full range of movement in toes, ankle, knees and hip.

4. POWER (4 OR 3 IF TOES ARE OMITTED)

Compare the power one by one on both limbs.

1) Toes (2): dorsiflexion and planterflexion.

2) Ankle (4): dorsiflexion, planter flexion, inversion, eversion.

3) Knee (2): flexion, extension.

4) Hip (6): adduction, abduction, flexion, and extension, internal & external rotation (resistance at the level of feet).

Power grades (MRC scale for muscle power):0/5 no visible muscle contraction. 1/5 muscle contractions visible but no movement at joints. 2/5: joint movement possible only when effect of gravity is eliminated. 3/5: movement possible against gravity but not against resistance. 4/5: movement possible against resistance but less than normal. 5/5: normal power.

5. REFLEXES

Pre requisites: (1) inform the patient about hammer. (2) Compare all reflexes one by one. (3) Try to ensure free fall movement of hammer. (4)Try to do minimum attempts for each reflex (Avoid repetition). (5) Reinforcement in case reflexes are absent. (6) clonus in case reflexes are exaggerated.

Deep tendon reflexes(2)

Ask the patient to relax his legs ٹانگیں ڈھیلی چھوڑ دیں

1. Ankle (S1,2): stretch the Achilles tendon by passive dorsiflexion at ankle by left hand. Eliciting Left sided ankle jerk is difficult, has to cross the arms.(practice it)
2. Knee (L3,4):

Description of reflexes: hyperactive (+++), normal (++), sluggish (+), with reinforcement (+/-), absent even with reinforcement (-).

Superficial reflexes (1) or (3)

1. Planters (S1, 2): tell about key to the patient. Scratch the most lateral part of sole and then medially after reaching base of little toe. Stop at the point where reflex is elicited.
2. Abdominal (T8-12): (if clinically indicated depending upon the findings of examination) move inward from outwards.
3. Cremastaric reflex (L1L2): rarely done.

MOTOR SYSTEM OF UPPER LIMB

EXPOSURE: shirt off

POSTURE: lying supine.

1. INSPECTION (4)

From foot end Inspect for wasting, asymmetry, deformity / contractures and abnormal movements / fasciculations.

2. PALPATION (3 OR 2 IF 3 IS OMITTED)

Warm your hands by rubbing before touching the patient and ask for pain بازوؤں میں درد تو نہیں

1) Check for fasciculations by tapping the muscles.
2) Palpate the muscles generally for tenderness (myositis). Look at the face while palpating.
3) Bulk: can be measured with measuring tape from some reference point like ulner styloid process).

3. TONE (2)

Ask the patient to relax بازو اور ہاتھ ڈھیلے چھوڑ دیں

1) Start with Shaking hand manure.
2) Check tone in full range of movement in fingers, wrists, elbows and shoulders.

4. POWER (5 JOINTS BUT IF NOT VERY RELEVANT THEN 3 (THUMB AND FINGERS CAN BE OMITTED EXCEPT JUST CHEKING FOR POWER OF GRIP OF HAND))

Compare the power one by one.

1) Thumb (5): flexion, extension, adduction, abduction, opposition.
2) Fingers (4): adduction (paper or card method), abduction (spreading fingers against resistance), flexion, extension (making and opening fist).
3) Wrist (4): flexion, extension, radial and ulner deviation.
4) Elbow (2): flexion and extension.
5) Shoulder (6): flexion, extension, adduction abduction, internal and external rotation (moving semi flexed elbow inwards and outwards against resistance).

5. REFLEXES (3):

Pre requisites: (1) again inform the patient about hammer before checking reflexes. (2) Compare all reflexes one by one. (3) Try to ensure free fall movement of hammer. (4)Try to do minimum attempts for each reflex (Avoid repetition). (5) Reinforcement in case reflexes are absent.

1) Brachioradialis (C5, 6): place both the hands at thighs (making the angle at elbow obtuse).

2) Biceps (C5, 6): with the hands placed same way as for brachioradialis reflex (making the angle at elbow obtuse), place your finger or thumb on bicep tendon and strike the hammer on your finger or thumb.

3) Triceps (C6, 7): hold patients forearm with your left hand. Bend the elbow, making angle at elbow obtuse to stretch triceps tendon and then strike the tendon directly.

SENSORY SYSTEM

PRIMARY SENSATIONS: DORSAL COLUMN SENSATIONS (3):

1. **LIGHT TOUCH** (mostly by dorsal column but at times also transmitted by lateral spinothalamic tract): use wisp of cotton (Tissue paper or lightly applied pressure by finger are alternates).

   In the lower limb Start from S1 (lateral sole and lateral dorsum of foot), L5 (medial dorsum of foot and lateral leg), L4 (medial leg and lateral thigh), L3 (medial thigh), L2 (upper medial thigh), L1 (inguinal ligament area and just above it). On posterior aspect S1 (lateral sole and lateral leg), S2 (postero-medial leg), S3 (postero-medial thigh), S4 (perineum).

   In the upper limb Start from C6 (thumb and lateral forearm), C7 (middle and index finger and mid palm), C8 (little finger and medial forearm), T1 (medial arm), T2 (upper medial arm and axilla), C4 (shoulder and upper deltoid). C5 (lateral arm).

2. **JOINT POSITION SENSE:** In lower limb check at big toe bilaterally. First demonstrate to the patient. Hold the patient's big toe from its sides by your thumb and index finger. If impaired, move to MTPJ of big toe. If still impaired then move to ankle or knee. Ask the patient to avoid guessing. کیا آپ بڑا انگوٹھے کے اوپر یا نیچے ہونے کا پتہ چلتا ہے اگر نہیں تو اندازہ نہ لگائیں

   In upper limb check at DIPJ of index finger. First demonstrate to the patient. Hold the patients distal digit of index finger from its sides by your thumb and index finger. If impaired then keep checking proximally i.e. PIPJ, MCPJ, wrist, elbow.

3. **VIBRATION:** use 128 Hz tuning fork. First apply over sternum and make sure that the patient appreciates buzzzzzzzzz, not the touch. کیا آپ کو تھرتھراہٹ محسوس ہو رہی ہے

   In lower limb Check at tip of big toes of both feet. If absent then keep moving proximally (IPJ of big toe, medial maleolus, tibial shaft, tibial tuberosity, anterior

superior iliac spine), till vibration is perceived. To increase sensitivity of test ask the patient to report when vibration is stopped by holding the tuning fork.

In upper limb check at DIPJ of index finger of both hands. If absent then keep moving proximally (radiostyloid process, olecrenon process, acromian process), till vibration is perceived.

PRIMARY SENSATIONS: LATERAL SPINO THALAMIC TRACT (3 or 1 if deep pain and temperature are omitted):

1. **SUPERFICIAL PAIN:** Use paper pin and use different pin for each patient to void transmission of hepatitis or HIV. First test on sternum and ensure that the ;patient can differentiate between head end (touch) and pointed end (pain). Neurological pin (neurotip) is preferred. Test for pain in all the dermatomes as mentioned in light touch.

2. **DEEP PAIN:** in lower limb apply firm compression on patient toe nails or squeeze the belly of calf muscles and ask the patient to report when the sensation becomes painful. While in upper limb apply firm compression on patient finger nails or squeeze the belly of biceps or triceps and ask the patient to report when the sensation becomes painful.

3. **TEMPERATURE:** not usually done. Tuning fork can be used as cold object but better way is to use hot and cold water filled serum bottles.

CO ORDINATION (11 but 9 since tone is already checked in motor system) (scheme – GPE sequence i.e. hands-arms-face-neck-trunk-legs)

POSTURE: while checking co ordination and cranial nerves patient sits, facing the doctor.

HANDS (3): Finger nose test (place your target finger at a distance to ensure full extension at elbow, finger – finger test, disdiodokokinesia (perform with arms fully extended).

ARMS (2): check tone (omit if already checked in motor system)(hypotonia), rebound phenomenon.

EYES (1): nystagmus (don't check at extreme of gaze)(fast component is towards the site of lesion)

SPEECH (1): Pakistan, Mustansar. (Scanning speech) بولیں پاکستان - بولیں مستنصر

KNESS (1): knee jerk while patient sits at the end of couch with legs hanging (pendular in cerebellar lesion).

LEGS (2): check tone (omit if already checked in motor system) (hypotonia). Heel – knee - shin test.

GAIT: (to be checked at the end of all the examination) walking on straight line with heel-toe gait with bare feet.

CRANIAL NERVES

Note: Detailed examination of cranial nerves is given in the other document with the title of Salman notes 4. Here is modified scheme of examination of cranial nerves keeping in mind the limitation of time in long case and in cases where cranial nerve pathology is less expected.

Posture: Most of examination of cranial nerves is done with the patient sitting.

OLFACTORY NERVE (1)

Ask about any disturbance in sense of smell.

آپ کو زکام تو نہیں؟ ناک کی ہڈی کا کوئی مسئلہ یا ناک کے اندر کا کوئی مسئلہ تو نہیں؟
آپ کو سونگھنے میں کوئی مسئلہ تو محسوس نہیں ہوتا۔ چیزوں کی بو محسوس ہو جاتی ہے؟

OPTIC NERVE (2)

Ask about history of problem in visual acuity, use of glasses

آنکھ کی نظر ٹھیک ہے؟ دور کا اور قریب کا ٹھیک ٹھیک نظر آ جاتا ہے؟ عینک استعمال کرتے ہیں؟ رنگوں کی پہچان میں کوئی مسئلہ تو نہیں ہوتا؟

Check light reflex (both direct and consensual).

(Visual field by confrontation method, far vision by Snellen's chart, colour vision by Ishihara chart and near vision by near vision charts are to be check only in cases where there problem is expected) (Fundoscopy can be done at the end of all the examination unless needed)

OCCULOMOTOR, TROCHLEAR, ABDUCENT NERVE (3)

1) INSPECTION: look at palpebral fissure (ptosis) or squint or nystagmus.
2) Ask about diplopia: آپ کو چیزیں دو دو تو نظر نہیں آتیں؟
3) EYE MOVEMENTS: with both eyes open ask the patient to follow your moving finger and report if he has diplopia.

سر کو ہلائے بغیر میری انگلی تو دیکھنے کی پوزیشن کریں اور جہاں جہاں انگلی جائے اُسے دیکھتے رہیں۔ سر صرف آنکھوں کی حرکت سے۔ سر نہ ہلائیں۔ اور اگر دو دو نظر آئیں تو بتائیں۔

The finger moves in the figure of "H". Look for nystagmus during movement of eye ball. If diplopia is reported close each eye one by one to pick which eye is causing false image. The false image is lateral one.

4) ACCOMMODATION REFLEX:

(Light reflex already checked)

TRIGEMINAL NERVE (3)

1) SENSORY PART (2): with wisp of cotton for light touch and pin for pain check the 2 sensations in 3 divisions of 5th nerve. (First demonstrate to the patient by applying stimulus on sternum).

2) MOTOR PART (3):

   a. Inspection: look for wasting of temporalis above zygomatic arch

   b. Ask him to clench his teeth while palpating the temporalis and maseters. - اپنے دانت زور سے دبائیں

   c. Check pterigoids by asking him to open his mouth against resistance and then moving the jaw sideways against resistance.

3) REFLEXES (2) (can be omitted unless needed):

   a. Corneal: with wisp of cotton touch the cornea not conjunctiva with patient looking towards opposite side. Look for both direct and consensual response. (Contraction of orbicularis occuli of both sides is normal response. Afferent by V1 and efferent by VII).

   b. Jaw jerk: let the jaw hang loose. Place your index finger between chin and lower lip. Hit the hammer in downward direction.

FACIAL NERVE (3)

1) HISTORY: Ask about history of lacrimation, dribbling of food or saliva from mouth, altered taste sensation, hyperacusis.

آنکھوں سے پانی تو نہیں آتا؟ منہ سے کھانا یا تھوک گرتا تو نہیں؟ چیزوں کا ذائقہ ٹھیک سے پتہ چل جاتا ہے؟ کسی ایک کان میں آواز زیادہ تو نہیں محسوس ہوتی؟

2) INSPECTION (5): look for asymmetry, redness or tearing from eye, nasolabial folds, wrinkles on forehead. Also look for vesicles in external auditory canal.

3) COMMANDS (4): Then ask the patient to

i) Make wrinkles on forehead. سر ہلائے بغیر چھت کی طرف دیکھنے کی کوشش کریں؟ ماتھے پر ڈالیں

ii) Close the eyes forcefully against resistance آنکھیں زور سے بند کریں اور کھولنے نہ دیں

iii) Show teeth دانت دکھائیں

iv) Blow air in moth with closed lips and then tap the cheeks منہ میں ہوا بھریں

(watch test for hyper accuses and taste sensation in anterior 2/3rd of tongue can be omitted unless eeded).

ESTIBULOCOCHLEAR NERVE

ESTIBULAR PART (3)

1) HISTORY: Ask about any hearing difficulty or ear discharge کان سے پیپ تو نہیں آتی؟ سنائی ٹھیک دیتا ہے؟

2) INSPECTION: examine the external auditory canal for scars, wax, redness (or tenderness)

3) HEARING TESTS (3)(may do any of 3):

   a. WHISPER TEST: From a distance of 60cm and the other ear closed and not letting the patient to read your lips, whisper 68 (for low pitched sound) and 100 (for high pitched sound).

   b. WATCH TEST:

   c. FINGER RUBBING TEST:

   (TUNING FORK TESTS i.e. Rennes test and Weber's test can be omitted unless needed)

CHOCHLEAR PART (1)

HISTORY: ask about history of vertigo. چکر تو نہیں آتے؟

(Hal pike's maneuver, caloric test and doll's eye movements are only for special situations)

VAGUS AND GLOSSOPHARANGEAL NERVES (5)

1) HISTORY: ask about history of regurgitation کھانا کھاتے وقت کھانا یا پانی ناک سے تو نہیں آتا؟

2) SPEECH: Ask him to say "egg": check for nasal twang. بولیں "ایگ"

3) Ask him to cough: check for bovine cough. کھانسی کریں -

4) Ask him to blow air in mouth with closed lips: منہ میں ہوا بھریں
Unable to do it in case of 9th and 10th nerve palsy as the air escapes from nose.

5) THROAT EXAMINATION: ask him to say aaaaaaaaaa. بولیں آآآآ

Check the movement of uvula. (Normally there is symmetrical rise of uvula and no deviation.

(Swallow test and touching posterior pharyngeal wall with orange stick can be omitted unless needed)

ACCESORY NERVE (4)

Examiner is to stand at the back of the patient:

1) INSPECTION: inspect from behind for wasting of trapezius.

2) PALPATE: palpate for bulk of sternocledomastoid and trapezius to look for atrophy.

3) Ask the patient to turn his face towards right against resistance and palpate left sternocledomaastoid and vice versa.

4) Ask the patient to shrug his shoulders against resistance کندھے اوپر اٹھائیں/اچکائیں

HYPOGLOSSAL NERVE (3)

1) Inspect while the tongue is still in mouth for wasting (wrinkles), fasciculations and then ask him to protrude it. زبان باہر نکالیں

Look for deviation (reference is incisors) or abnormal movements.

2) Test the power by palpating the cheeks while he presses the tongue against the cheeks. زبان کو منہ کی اندر کی طرف سے گالوں پر زور سے لگائیں۔

3) Ask him to say lalalalalala. بولیں لالالا۔

STANCE AND GAIT

STANCE AND GAIT AND FUNDOSCOPY ARE TO BE CHECKED AT THE END AFTER COMPLETION OF ALL THE EXAMINATION UNLESS NEEDE.

Romberg's Test: Ask the patient to stand with feet together and eyes open. Check for steadiness. Then ask the patent to close his eyes.

(Patient with cerebellar lesion cannot stand steady even with eyes open. With proprioceptive or vestibular deficit, balance deteriorates by closing eyes.)

Ask the patient to walk with bare feet and preferably trouser lifted. Look at the gait. Ask the patient to walk on straight line with heel – toes walk (tandem walk).

Ask the patient to sit and then stand up without support to look for proximal muscle weakness.

(4 remaining components of nervous system examination i.e. higher mental functions/mini mental state examination, cortical sensations, primitive reflexes and SOMI to be checked in special cases)

"THANKS AND COVER THE PATIENT"